

IN THE CLAIMS:

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1. (Currently amended) A vacuum arc evaporation source, comprising:
a plurality of cathodes, each made of different materials; and
a plurality of insulating layers for insulating the plurality of cathodes from each other;
the plurality of cathodes and the plurality of insulating layers arranged radially in alternating layers;
wherein said plurality of cathodes are evaporated by vacuum arc discharge.
 2. (Previously presented) The vacuum arc evaporation source of Claim 1, wherein said plurality of cathodes are disposed in coaxially alternating layers with insulating material.
 3. (Original) The vacuum arc evaporation source according to Claim 1, wherein said plurality of cathodes includes a cathode having a material containing carbon and a cathode having a material containing metal of a group 4A, 5A or 6A in the periodic table.
 4. (Original) The vacuum arc evaporation source according to Claim 2, wherein each of said cathodes has a circular shape.

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5. (Currently amended) A film formation apparatus for forming a laminate film including a plurality of heterogeneous films on a surface of a substrate, the apparatus comprising:

a vacuum arc evaporation source having a plurality of cathodes, each made of different materials; and a plurality of insulating layers for insulating the plurality of cathodes from each other; the plurality of cathodes and the plurality of insulating layers arranged radially in alternating layers; wherein said plurality of cathodes are evaporated by vacuum arc discharge;

an arc power supply for supplying arc discharge power to said plurality of cathodes of said vacuum arc evaporation source; and

By a switch for switching the arc discharge power of said arc power supply among the plurality of cathodes of said vacuum arc evaporation source.

6. (Currently amended) A film formation apparatus for forming a laminate film including a plurality of heterogeneous films on a surface of a substrate, the apparatus comprising:

a vacuum arc evaporation source having a plurality of cathodes, each made of different materials; and a plurality of insulating layers for insulating the plurality of cathodes from each other; the plurality of cathodes and the plurality of insulating layers arranged radially in alternating layers; wherein said plurality of cathodes are evaporated by vacuum arc discharge; and

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a magnetic filter for generating a magnetic field to curve plasma containing material from said vacuum arc evaporation source so as to remove coarse particles from the plasma and introduce the plasma into vicinity of the substrate.

7. (Original) The film formation apparatus according to claim 6, wherein said magnetic filter comprises:

a curved transport duct;

a magnetic coil for generating the magnetic field curved along said transport duct; and

a DC power supply for exciting said magnetic coil.

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8. (Previously presented) The film formation apparatus according to Claim 6, further comprising:

an arc power supply for supplying arc discharge power to the plurality of cathodes of said vacuum arc evaporation source; and

a switch for switching the arc discharge power of said arc power supply among the plurality of cathodes of said vacuum arc evaporation source.

9. (Original) The film formation apparatus according to claim 8; wherein said magnetic filter comprises

a curved transport duct;

a magnetic coil for forming the magnetic field curved along said transport duct;

and

a DC power supply for exciting said magnetic coil.

10. (Previously presented) The film formation apparatus according to Claim 5;
further comprising:

a magnet disposed adjacent to a surface of the cathode opposite a surface on
which plasma is generated, for controlling a motion of an arc point of the vacuum arc
discharge.

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11. (Previously presented) The film formation apparatus according to Claim 6;
further comprising:

a magnet disposed adjacent to a surface of the cathode opposite a surface on
which plasma is generated, for controlling a motion of an arc point of the vacuum arc
discharge.

